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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,865	08/17/2001	Eric G. Lundquist	DN A01042	6570

7590 03/26/2003

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EXAMINER
MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
1711	6

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/932,865	LUNDQUIST ET AL.	
	Examiner	Art Unit	
	Jeffrey C. Mullis	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *7-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-6* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Applicant's election with traverse of divinyl benzene polymer macroporous polymer supports, Ziegler-Natta catalysts as the catalytic component and ethylene as the olefin and embodiments where a substrate is not used in Paper No. B is acknowledged. The traversal is on the ground(s) that "claims 15-20 are in essence a further limitation of the claims of Group I in which the matrix is affixed to a substrate". This is not found persuasive because no election between groups of inventions was made in the Office action of 12-23-02 but rather only an election of species was made. The election will be extended to a reasonable number of species upon the allowance of a generic claim.

The requirement is still deemed proper and is therefore made FINAL.

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-6, drawn to a catalyst, classified in Class 502, subclass 100.

II. Claims 7-20, drawn to a process of polymerization, classified in Class 526, subclass 72.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or

both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product such as a process of polymerizing acrylic monomers.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

During a telephone conversation with Richard Clikeman on February 24, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

With regard to the above requirement for election between groups of <u>inventions</u>, namely the inventions of Group I and Group II i.e. claims 1-6 and 7-20, this election is of course not being

made FINAL since the requirement is only now being made in this Office action.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Anderson et al. (USP 4,127,594).

Anderson et al. disclose a process in which XAD-4 from Rohm & Haas is treated with a rhodium salt to form a supported catalyst. Note "Illustrative Embodiment II" in column 6. Since the rhodium is capable of complexing to olefinic unsaturation (as evidenced by the capability of the material for catalyzing olefin

hydrogenation) and since the rhodium becomes supported, it would reasonably appear that the catalytic component (i.e. the rhodium complex) becomes coordinated to the olefinic groups of the commercially available Rohm & Haas product and therefore the product of patentees reasonably appeared to contain a catalytic component reacted with olefinic groups.

Note Hubbard et al., in Reactive and Functional Polymers, 36 (1998) 17-30, cited by applicants at page 18 thereof including Figure 1 which discloses that poly DVB as is embraced by the commercially available Rohm & Haas products XAD-4 and XAD-2 inherently contain olefinic pendant groups.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sanders et al. (USP 4,348,509).

Sanders et al. disclose a composition in which chloroplatinic acid is used to impregnate commercially available Rohm & Haas product XAD-4. Since XAD-4 is known to contain

pendant olefinic groups as set out above and since transition metals are known to coordinate to olefinic groups, it would reasonably appear that the chloroplatinic acid coordinates to the olefinic unsaturation. Note column 3 lines 30-44 and the Example in which chloroplatinic acid is used to impregnate the Rohm & Haas product.

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Welborn, Jr. (USP 5,191,052).

Welborn, Jr. discloses a process in which a substituted zirconium is used to polymerize butadiene. Note column 24 lines 11-41. Since a butadiene polymer chain becomes attached to the zirconium during polymerization, the butadiene polymer chain end can be said to be reacted with the zirconium but in any case since the product contains unsaturations from the butadiene, it would also reasonably appear that a portion of the butadiene would be coordinated to the zirconium and that the product would be a zirconium supported on the butadiene polymer especially since there was no attempt to purify the material.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. Note In re

Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Mullis whose telephone number is (703) 308-2820. The examiner can normally be reached on Monday-Friday from 9:30 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for this Group is before final (703) 872-9310 and after final (703) 8729311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

J. Mullis:cdc

March 24, 2003

Jeffrey Mullis
Primary Examiner
Art Unit 1711